PROVIDER GUIDELINES

STATEWIDE LEAD SCREENING/LEAD TESTING PLAN*

There are four criteria for testing a child for lead poisoning:

1 **GEOGRAPHY *(Option One)***: All children living within specific areas (high-risk ZIP codes*) should be tested….OR….**GEOGRAPHY *(Option Two)***: Children can receive a risk evaluation, with recommendation regarding testing, using the website: *midata.msu.edu/bll*. This risk evaluation is based on the child's address (census block group) and other predictors.

2 **MEDICAID and WIC**: **ALL MEDICAID- and WIC-ENROLLED CHILDREN MUST BE TESTED—NO EXCEPTIONS OR WAIVERS EXIST**, regardless of the child's Michigan residency location. **MIChild**: **MIChild-enrolled children should be tested if any risk factors exist.***

3 **QUESTIONNAIRE**: The parents or guardians of children not in one of the previous two categories should be asked exposure questions to determine each child's risk. If the answer is "Yes" or "Don't Know" to any of the exposure questions, that child should be tested.

4 **REFUGEE CHILDREN/FOREIGN ADOPTEES/IMMIGRANTS/FOSTER CARE CHILDREN:** The CDC recommends that newly arrived refugee children and internationally adopted children (ages 6 months to 16 years) receive blood lead testing upon entry to the United States; repeat testing of children six months to six years and 3 to 6 months after placement in permanent residences.

*See the complete Statewide Lead Testing/Lead Screening Plan for the definition and list of high-risk ZIP codes. This document can be found at Michigan.gov/leadsafe

POSSIBLE SOURCES OF EXPOSURE

Auto/boat repair
Auto parts/accessories manufacture
Radiator repair
Battery manufacture/repair
Bridge/tunnel/elevated highway repair
Plumber, pipe fitter (older buildings)
Wrecking and Demolition
Glass/Chemical/Plastics manufacturing
Brass/copper/aluminum processing
Rubber products manufacturing
Steel welding and cutting
Renovate/remodel older homes
Furniture refinishing
Art/painting supplies
Jewelry/Pottery/Stained Glass making
Lead soldering (e.g., electronics)
Lead shot, bullets, and fishing sinkers
Brass/copper/bronze/lead/iron foundries
Power washing of pre-1978 home/bldg.
Scrap metal handling
Paint manufacture (non-residential paint)
Machining/grinding/melting lead alloys
Bronze polishing
Leaded glass manufacturing
Burning lead-painted wood

OTHER

IMPORTED COSMETICS: Middle East, India, Pakistan, Africa: Kohl, Surma, Al Kohl
FOODS: ▪ **Middle East**: Lozeena ▪ **Mexico**: Tamarind Candy, Chocolate-Covered Grasshoppers
FOLK REMEDIES: Hispanic: Azarcon, Alarcon, Coral, Luiga, Maria Luisa, Rueda ▪ **Mexico:** Greta ▪ **Tibet, India**: Ayurvedic Medicine, Tibetan Herbal Vitamin ▪ **India:** Ghasard, Surma ▪ **Iran**: Bint Al Zahab ▪ **Saudi Arabia:** Bint Dahab, Santrinj, Traditional Saudi Medicine ▪ **Kuwait:** Bokhoor ▪ **China:** Jin Bu Huan, Po Ying Tan, Ba-Baw-San ▪ **Vietnam**: Pay-Loo-Ah

ENVIRONMENTAL

Lead dust from deteriorating paint
Ceramics/pottery/lead crystal
Lead-soldered cans (imported)
Burning lead-painted wood
Use of water from lead pipes
Soil/dust near industries/smelters/heavily-traveled roadways
Mini-blinds (imported)
Candles with lead wicks
Some imported painted toys

BLOOD LEAD TESTING TIPS

- "**Testing**" requires a blood specimen.
- "**Screening**" is asking exposure-related questions and appropriate only when a child is NOT Medicaid-enrolled and does NOT live in a high-risk ZIP code.
- There is NO requirement that the initial blood test for a child be a venous specimen; a capillary specimen is acceptable.
- If the capillary result is below 10 µg/dL, the CDC's level of concern, no additional procedure is necessary until the next recommended testing time.
- If the capillary result is ≥10 µg/dL, then a confirmatory venous sample needs to be obtained. The venous sample need not be done in the primary care provider's office.
- If the capillary or venous specimen is collected in the provider's office and packaged for mailing, CLIA certification for the office is NOT required.

BLOOD LEAD DIAGNOSTIC TESTING

NO level of lead in the blood is "normal"
Diagnostic testing is REQUIRED for capillary blood lead levels(BLL) ≥10 µg/dL

Capillary test result:	Obtain a venous test within:
10-19 µg/dL	3 months
20-44 µg/dL	1week-1 month
45-59 µg/dL	48 hours
60-69 µg/dL	24 hours
≥70 µg/dL	IMMEDIATELY: EMERGENCY TEST

The higher the BLL and the younger the child's age, the more urgency there is for a diagnostic test.

Screening Young Children for Lead Poisoning, CDC, 11/1997, pg 92

If there is a deviation of more than 5 µg/dL between a capillary sample and the venous confirmatory, a repeat venous test should be done in one month.

Michigan Childhood Lead Poisoning

PEDIATRIC CONSULTANTS

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If you are unable to find an answer to your questions here, do not hesitate to contact your local health department, one of the above-listed pediatric consultants who are extremely well-versed in childhood lead poisoning, or a staff member of the MDCH Michigan Childhood Lead Poisoning Prevention Program at 517.335.8885.

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PROVIDER GUIDELINES

Physician and Health Department Follow-Up

blood lead level µg/dL	Elevated Blood Lead Levels Actions to Take	Timeframe **for beginning intervention**
<10	Test again in one year. Provide caregiver with anticipatory guidance at appropriate reading level and language to identify potential sources of exposure.	
10-14	Provide caregiver lead education. Provide follow-up testing. Refer the child for social services if necessary	within 30 days
15-19	Above actions plus: If blood lead levels (BLL) persist, i.e., two venous BLLs in this range at least three months apart; or increase, proceed according to actions for BLLS 20-44.	within 2 weeks
20-44	Above actions plus: Provide coordination of care (case management). Provide clinical evaluation and care. Provide environmental investigation and control current lead hazards	within 1 week
45-69	Above actions	within 48 hours
≥70	Above actions plus: Hospitalize child for chelation therapy immediately.	within 24 hours

Medical Assessment and Intervention

blood lead level µg/dL	Elevated Blood Lead Levels Actions to Take	Timeframe **for beginning intervention**
20-44	Lead education: Dietary Environmental Follow-up blood lead monitoring Complete history and physical exam Lab work: Hemoglobin or hematocrit Iron status Environmental investigation Lead hazard reduction Neurodevelopmental monitoring Abdominal X-ray with bowel decontamination if indicated	
45-69	Lead education: Dietary Environmental Follow-up blood lead monitoring Complete history and physical exam Complete neurological exam Lab work: Hemoglobin or hematocrit Iron status FEP or ZPP Environmental investigation Lead hazard reduction Neurodevelopmental monitoring Abdominal X-ray with bowel decontamination if indicated Chelation therapy	
≥70	Hospitalize and commence chelation therapy Proceed according to actions for 45-69 µg/dL	

The following actions are NOT recommended at any blood lead level:

-Searching for gingival lead lines -Testing of neurophysiologic function -X-ray fluorescence of long bones	-Testing of hair, teeth, or fingernails for lead -Radiographic imaging of long bones	-Evaluation of renal function (except during chelation with $CaNa_2EDTA$)

Source: *Managing Elevated Blood Lead Levels Among Young Children, CDC 2002*

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